

control by restriction, the resulting pPLT4200 plasmid was used for genetic transformation of plants.

Replace the ABSTRACT with the following:

The present invention relates to the production of transgenic plants able to express, in seed storage tissues, a lysosomal enzyme in enzymatically active form and in amounts appropriate to its use in enzyme replacement therapy. In particular, the present invention relates to plants and seeds containing this enzyme, for example in one embodiment a genetically transformed plant able to produce a lysosomal enzyme of animal or human origin, the plant being transformed with the use of an expression vector comprising a promoter of a particular sequence operably linked to a particular DNA sequence encoding a signal sequence, and a DNA sequence encoding the lysosomal enzyme lacking its native signal sequence, wherein the lysosomal enzyme is expressed in seed storage tissues in enzymatically active form and in an amount of at least 0.8% of the seed extracted total proteins. Related claims to methods and composition of matter are supported and provided.